

REMARKS

Claims

Claims 1-33 are pending in the application. Claims 1-33 have been rejected. No claims have been amended herein.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent Publication No. to 2003/0073453 to Basilier in view of U.S. Patent Publication No. 2002/0196743 to Thalanany et al.

Claims 1-33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2003/0073453 to Basilier (“Basilier”) in view of U.S. Patent Publication No. to 2002/0196743 to Thalanany et al. (“Thalanany”). Applicants respectfully traverse this rejection, as hereinafter set forth.

To establish a *prima facie* case of obviousness the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974); *see also* M.P.E.P. § 2143.03. Additionally, there must be “a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Finally, to establish a *prima facie* case of obviousness there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the nature of the problem itself, and not based on the Applicant’s disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); M.P.E.P. § 2144. Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. *KSR*, 127 S.Ct. at 1742; *DyStar*, 464 F.3d at 1367.

The 35 U.S.C. § 103(a) obviousness rejections of claims 1-33 are improper because the elements for a *prima facie* case of obviousness are not met. Specifically, the rejection fails to meet the first criterion that the prior art reference must teach or suggest all the claim limitations. Applicants submit that any proposed combination of the Basilier reference in view of the Thalanany reference does not and cannot establish a *prima facie* case of obviousness under 35 U.S.C. § 103 regarding the presently claimed invention of independent claims 1-33 because, at the very least, the cited prior art does not teach or suggest all the claim limitations of the presently claimed invention as set forth hereinabove.

Claims 1 and 33 were rejected as being unpatentable over Basilier in view of Thalanany. Applicant respectfully submits that neither Basilier nor Thalanany teaches the limitation “using the service option parameter to indicate whether header compression is enabled, and if it is enabled, which header compression algorithm is used”.

Basilier discloses systems and methods to establish multicast capabilities for communication systems including wireless communication and internet protocol (IP). An exemplary communication system may include one or more content servers, an IP network, packet data serving nodes, an IP radio to packet network, base stations and mobile stations. (Abstract) The content servers may provide a multicast on the same IP multicast address. (Abstract)

The Office Action notes “Basilier does not disclose using the service option parameter to indicate whether header compression is enabled and if so which header compression algorithm is used.” (Office Action, page 3) Therefore, Applicant submits that Basilier does not teach or suggest the limitation “using the service option parameter to indicate whether header compression is enabled, and if it is enabled, which header compression algorithm is used”.

Thalanany is directed to an apparatus and method for enhancing performance in a packet data system. (Title) An apparatus and a method for controlling the loss of data packets in a system is provided. The packets are transmitted from a source to a destination via a packet forwarder over a plurality of links having different bandwidths. (Abstract) The packet forwarder actively monitors the average number of packets in the first buffer and when the average number rises above a pre-defined threshold, the packet forwarder signals the source to stop sending data

packets. The source then compresses and stores data packets it receives from a network in a second buffer until the source can once again transmit the compressed packets to the packet forwarder. When the source's buffer is full, the source discards any packets it receives from the network before performing compression. (Abstract)

The Office Action states:

With respect to claims 1, 11, 21, and 33, Thalanany et al., in the field of communications, discloses using a service option parameter to indicate whether header compression is enabled and if so which header compression algorithm is used. (See pages 2-3 paragraphs 15, 20, and 21 of Thalanany et al. for reference to sending to a PDSN a packet including compression control protocol information, which comprises a service option parameter, including header compression information inherently indicating the header compression is used as well as the type of compression used).

The cited paragraphs read as follows:

[0015] Despite the actions described above, the PCF 106 may drop a compressed packet or detect a packet drop at other RAN 104 devices due to link layer aborts. When the drop occurs, the PCF 106 sends a Compression Control Protocol (CCP) reset request message (depending on the type of compression implemented) to the PDSN 110. These messages initiate the CCP or header compression resynchronization procedure at the PDSN 110. In an alternate embodiment, an out-of-band control signal may be sent from the PCF 106 to the PDSN 110 to initiate compression state resynchronization. In this case, the PDSN 110 will receive the out-of-band signal from the PCF 106 and initiate the compression resynchronization procedure. The procedures for header and payload compression re-synchronization are defined in the following documents: (1) Network Working Group; Request for Comments 2057; M. Degermark et al., Lulea University of Technology, February 1999, (2) Network Working Group; Request for Comments: 2508; S. Casner et al., Cisco Systems, February 1999, (3) Network Working Group, Request for Comments 1962; D Rand; Novell 1996, (4) Network Working Group; Request for Comments 1144; V. Jacobson; LBL; February 1990, and (5) Network Working Group; Request for Comments:3095 which is based on draft-ietf-rohe-rtp-09.txt (by Carsten Burmeister, Feb. 26, 2001). The resynchronization procedure resets state information associated with compression at both the PDSN 110 and the MS

100. Prior to the completion of CCP resynchronization, all the PPP frames received by the MS 100 are rejected because the state information associated with the compression is not yet initialized.

[0020] In the preferred embodiment of the present invention, the PCF 106 sends a CCP reset request message and/or a header compression CONTEXT-STATE message to the PDSN to initiate the CCP re-synchronization procedure, and header compression re-synchronization procedure, respectively, when a packet containing compressed PPP frames is dropped at the PCF 106. These messages are also sent if the PCF 106 receives loss indication from other RAN devices. The packet loss may occur due to buffer overflow or link layer abort. In an alternate embodiment, the PCF 106 may send an out-of-band control signal to the PDSN 110 to initiate compression state re-synchronization.

[0021] In the absence of the method of the present invention, a dropped packet containing compressed PPP frame(s) at the PCF 106 or any other intermediate node between the PCF 106 and the MS 100 is likely to result in missing PPP frames at the MS 100. The MS 100 detects missing PPP frames after it receives subsequent PPP frames from the PDSN 110. The detection of a PPP frame loss at the MS 100, and the MS 100 initiating the CCP and header compression re-synchronization procedures incurs a higher latency, and consumes radio resources.

Despite diligent study of these paragraphs and the remainder of the Thalanany reference, Applicant finds no mention of service option parameters, nor of the limitation “using the service option parameter to indicate whether header compression is enabled, and if it is enabled, which header compression algorithm is used” as found in claims 1 and 33. Thalanany discloses how re-synchronization occurs after packet drop, not Applicant’s cited limitation. Therefore, Applicant requests that the rejections of claims 1 and 33 be withdrawn.

Claim 11 is allowable for the reasons given above for claims 1 and 33.

Claim 21 is allowable for the reasons given above for claims 1 and 33.

The 35 U.S.C. § 103(a) obviousness rejections of claim 27 is improper because the Office Action is clearly defective. {, lacks clarity and completeness and engages in piecemeal examination.} M.P.E.P. § 707 and CFR § 1.104 require that the Office Action be “complete as to all matters” and “the ground of rejection [be] fully and clearly stated.”

In the present Office Action, Applicant’s claim 27 is rejected under 35 U.S.C. §103(a) as

being unpatenable over Basilier *in view of Thalanany*. (Office Action, p. 2; emphasis added.) However, the body of the rejection is entirely silent regarding Thalanany in connection with claim 27. In fact, Thalanany is only introduced in the rejection banner of the §103 rejection and is never again acknowledged as being applicable to claim 27. Accordingly, Applicant respectfully asserts that the oversight of applying Thalanany to Applicant's claimed invention results in the lack of proffering a *prima facie* case of obviousness on various grounds including:

- a) failure of the cited references to teach or suggest all of the claims limitations, and
- b) failure of the Office Action to state a "reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed.

Applicant therefore, requests that the rejection of claim 27 be withdrawn.

Claims 2, 12, and 22 are allowable as depending directly from an allowable base claim.

Claims 3 and 13 are allowable as depending directly from an allowable base claim.

Claims 4, 14, and 13 are allowable as depending directly or indirectly from an allowable base claim.

Claims 5, 15, 24, and 28 are allowable as depending directly from an allowable base claim.

Claims 6, 16, 25, and 29 are allowable as depending directly from an allowable base claim.

Claims 7, 17, and 30 are allowable as depending directly from an allowable base claim.

Claims 8 and 18 are allowable as depending directly from an allowable base claim.

Claims 9, 10, 19, 20, 26, 31, and 32 are allowable as depending indirectly from an allowable base claim.

On yet a further note, the M.P.E.P. and 37 C.F.R. require the Office Action to be complete as to all matters. (M.P.E.P. § 707.07). The Office Action rejected claim 23 in the rejection banner of the §103 rejection but never again acknowledges that such a claim is pending and therefore is defective in an attempt to apply any cited references to the claim. Accordingly, Applicants respectfully request the rejections be withdrawn.

Therefore, for at least these reasons identified above, the rejection of Applicants'

invention as recited in claims 1-33 is improper and should be withdrawn.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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